Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0401132F: C-130J PROGRAM

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	25.190	30.019	26.770	0.000	26.770	31.569	5.898	18.297	23.956	Continuing	Continuing
675061: <i>C-130J</i>	25.190	30.019	26.770	0.000	26.770	31.569	5.898	18.297	23.956	Continuing	Continuing

A. Mission Description and Budget Item Justification

The C-130J is a medium-sized transport aircraft capable of performing a variety of combat delivery (tactical airlift) operations across a broad range of mission environments. The C-130J aircraft, with its extended (by 15 feet) fuselage, provides additional cargo carrying capacity for the USAF combat delivery mission compared with legacy C-130E/H and the C-130J (short). Special mission variants of the C-130J conduct airborne psychological operations (EC-130J), weather reconnaissance (WC-130J), search and rescue (HC-130J), and special operations (MC-130J). All aircraft variants must be capable of worldwide operations.

FY10 C-130J program RDT&E funding provides for:

- 1.) Participation in the International Co-operative Systems and Software Upgrade Requirements Management (COSSURM). COSSURM participants include the United Kingdom, Australia, Italy, Denmark, Canada, Norway, and the United States. COSSURM provides a mechanism to jointly identify, collect, define, analyze, and price requirements. By combining requirements and resources under COSSURM, each participating country will save in aircraft upgrade costs.
- 2.) Continuation of Block 7.0 Upgrades, testing, and trial kit installation(s). Block 7.0 is the second phase of a three-block upgrade initiative which primarily addresses mandated Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements. Block 7.0 is the first Block Upgrade initiative that is a true International partnership, as the development costs are being shared by each participating nation. Block 7.0 requirements include:
- a.) Communication, Navigation & Identification (CNI) upgrades
- b.) Dual Multi-Mode Receivers (MMR) with TSO C-129A Civil Global Positioning System (GPS)
- c.) CNI Special Processor upgrade
- d.) Tactical Datalink (TDL)
- e.) Mission Computer (MC) upgrades

Block 7.0 (as well as all future Block Upgrades) will be integrated into the training systems integration lab prior to incorporation into the fielded trainers.

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0401132F: C-130J PROGRAM

BA 7: Operational Systems Development

3.) Start of Block 8.0 Upgrades. Block 8.0 is the last phase of three block upgrades which will complete all known mandated Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements. Block 8.0 will again be an International partnership with costs being shared by each participating nation. Block 8.0 requirements include:

- a.) TEMPEST Compliance
- b.) IFF transponder Mode-5
- c.) Data-link (line of sight and beyond line of sight)
- d.) ADS-A/B
- e.) Mission Computer (MC) upgrades
- 4.) Other AMC approved initiatives. AMC has prioritized requirements that do not fall within the International Block Upgrade program, which primarily address deficiencies, system improvements, and diminishing manufacturing sources (DMS). This includes Navigation Safety upgrades, Joint Precision Airdrop System, and Large Aircraft Infrared Counter Measures (LAIRCM), among other priorities.

FY11 C-130J program RDT&E funding will continue paticipation the COSSURM effort, Block 7.0, Block 8.0 and other AMC approved initiatives.

This effort is assigned to Budget Activity 7, as it supports an operational system.

B. Program Change Summary (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	27.354	30.019	0.000	0.000	0.000
Current President's Budget	25.190	30.019	26.770	0.000	26.770
Total Adjustments	-2.164	0.000	26.770	0.000	26.770
 Congressional General Reductions 		0.000			
 Congressional Directed Reductions 		0.000			
 Congressional Rescissions 	0.000	0.000			
Congressional Adds		0.000			
Congressional Directed Transfers		0.000			
Reprogrammings	-1.400	0.000			
SBIR/STTR Transfer	-0.690	0.000			
Other Adjustments	-0.074	0.000	26.770	0.000	26.770

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0401132F: C-130J PROGRAM 675061: C-130J

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
675061: <i>C-130J</i>	25.190	30.019	26.770	0.000	26.770	31.569	5.898	18.297	23.956	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The C-130J is a medium-sized transport aircraft capable of performing a variety of combat delivery (tactical airlift) operations across a broad range of mission environments. The C-130J aircraft, with its extended (by 15 feet) fuselage, provides additional cargo carrying capacity for the USAF combat delivery mission compared with legacy C-130E/H and the C-130J (short). Special mission variants of the C-130J conduct airborne psychological operations (EC-130J), weather reconnaissance (WC-130J), search and rescue (HC-130J), and special operations (MC-130J). All aircraft variants must be capable of worldwide operations.

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- 2.) Continuation of Block 7.0 Upgrades, testing, and trial kit installation(s). Block 7.0 is the second phase of a three-block upgrade initiative which primarily addresses mandated Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements. Block 7.0 is the first Block Upgrade initiative that is a true International partnership, as the development costs are being shared by each participating nation. Block 7.0 requirements include:
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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY
3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

BA 7: Operational Systems Development

DATE: February 2010

R-1 ITEM NOMENCLATURE
PE 0401132F: C-130J PROGRAM
675061: C-130J

- 3.) Start of Block 8.0 Upgrades. Block 8.0 is the last phase of three block upgrades which will complete all known mandated Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements. Block 8.0 will again be an International partnership with costs being shared by each participating nation. Block 8.0 requirements include:
- a.) TEMPEST Compliance
- b.) IFF transponder Mode-5
- c.) Data-link (line of sight and beyond line of sight)
- d.) ADS-A/B
- e.) Mission Computer (MC) upgrades
- 4.) Other AMC approved initiatives. AMC has prioritized requirements that do not fall within the International Block Upgrade program, which primarily address deficiencies, system improvements, and diminishing manufacturing sources (DMS). This includes Navigation Safety upgrades, Joint Precision Airdrop System, and Large Aircraft Infrared Counter Measures (LAIRCM), among other priorities.

FY11 C-130J program RDT&E funding will continue paticipation the COSSURM effort, Block 7.0, Block 8.0 and other AMC approved initiatives.

This effort is assigned to Budget Activity 7, as it supports an operational system.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Cooperative Systems and Software Upgrade Requirements Management (COSSURM) - Collects all potential requirements for inclusion into a Block Upgrade.	0.740	0.530	0.530	0.000	0.530
FY 2009 Accomplishments: In FY 2009: COSSURM efforts for Blk 8.1 were concluded, with the International Program Directive (IPD), which details what will be included in the Request for Proposal (RFP) for the next Block, being created in the Block Requirements Approval Meeting (BRAM) #2.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

BA 7: Operational Systems Development

DATE: February 2010

R-1 ITEM NOMENCLATURE
PE 0401132F: C-130J PROGRAM
675061: C-130J

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: In FY 2010: COSSURM efforts begin for Blk 9.0. Major milestones expected to be completed include the Capabilities Clarification Meeting (CCM), the Initial Capabilities Approval Meeting (ICAM), and the Preliminary Technical Approach Approval Meeting.					
FY 2011 Base Plans: In FY 2011: the Block 9.0 COSSURM efforts continue. Major milestones expected to be completed include the Initial Systems Requirements Review (SRR), System Description Approval Meeting, and the Block Requirements Approval Meeting (BRAM) #1.					
FY 2011 OCO Plans: In FY 2011 OCO: N/A					
MAJOR THRUST: BLOCK 7.0: Adds Link 16, a new Flight Management System (FMS), Civil Global Positioning System (GPS) Navigation, and a Special Mission Processor-Interface (SMP-I)	23.347	28.307	1.858	0.000	1.85
FY 2009 Accomplishments: In FY 2009: The effort consisted of Common Core hardware and software development, as the major milestones reached included Preliminary Design Review (PDR), Critical Design Review (CDR) Phase I and the Integrated Baseline Review (IBR).					
FY 2010 Plans: In FY 2010: The effort will conclude development of the Common Core hardware and software, and the program will enter into the testing and Common Core Trial Kit Installation (TKI) phase. Major milestones expected to be completed include CDR Phase II and the Test Readiness Review (TRR).					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

BA 7: Operational Systems Development

DATE: February 2010

R-1 ITEM NOMENCLATURE
PE 0401132F: C-130J PROGRAM
675061: C-130J

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011: The effort will conclude the test and Common Core TKI phase, effectively closing the Common Core effort. US TKIs, for the US Marine Corps (USMC), the US Coast Guard (USCG), for Air Combat Command (ACC) and other Air Mobility Command (AMC) platforms, will begin.					
FY 2011 OCO Plans: In FY 2011 OCO: N/A					
MAJOR THRUST: BLOCK 8.1. Adds Identification Friend or Foe (IFF) Mode 5, Civil Data Link, Automatic Dependent Surveillance - Broadcast (ADS-B)	0.000	0.500	23.700	0.000	23.700
FY 2009 Accomplishments: In FY 2009: N/A					
FY 2010 Plans: In FY 2010: The contractor will begin and submit the proposal and all fact-finding and negotiations should take place.					
FY 2011 Base Plans: In FY 2011: The effort will go on contract and Common Core hardware and software development will begin. Major Milestones expected to be completed include Systems Requirements Review (SRR), Preliminary Design Review (PDR) and Integrated Baseline Review (IBR).					
FY 2011 OCO Plans: In FY 2011 OCO: N/A					
MAJOR THRUST: Other AMC approved inititatives	0.870	0.500	0.500	0.000	0.500
FY 2009 Accomplishments: In FY2009: Provides resources to rapidly address emerging wartime requirements					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development

PE 0401132F: *C-130J PROGRAM*

675061: C-130J

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans:					
In FY2010: Provides resources to rapidly address emerging wartime requirements					
FY 2011 Base Plans:					
In FY2011: Provides resources to rapidly address emerging wartime requirements					
FY 2011 OCO Plans:					
In FY 2011 OCO: N/A					
MAJOR THRUST: International Program Office (IPO) Support. Funds for A&AS, Travel, Supplies and DFAS/DCMA Support	0.233	0.182	0.182	0.000	0.182
FY 2009 Accomplishments: In FY 2009, A&AS, Travel, Supplies and DFAS/DCMA Support (includes \$0.125 of AF Withhold)					
FY 2010 Plans:					
In FY 2010, A&AS, Travel, Supplies and DFAS/DCMA Support					
FY 2011 Base Plans:					
In FY 2011, A&AS, Travel, Supplies and DFAS/DCMA Support					
FY 2011 OCO Plans:					
In FY 2011 OCO: N/A					
Accomplishments/Planned Programs Subtotals	25.190	30.019	26.770	0.000	26.770

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

Line Item

R-1 ITEM NOMENCLATURE

PROJECT

3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development

PE 0401132F: C-130J PROGRAM

FY 2011

675061: C-130J

C. Other Program Funding Summary (\$ in Millions)

FY 2009 0.000

FY 2010 0.000 FY 2011 Base 0.000

FY 2011 OCO 0.000

Total FY 2012 0.000 31.132

FY 2013 57.986 FY 2014 60.555

FY 2015 Complete Total Cost 61.128

0.000

Cost To

0.000

• PE 0401132F: C-130J Procurement (BP1100)

D. Acquisition Strategy

C-130J aircraft will be modified using a 'block upgrade' strategy. The full CNS/ATM / nav safety requirement will be met in three block upgrades. Block 6.0 development was funded from FY03-07. Block 7.0 started in FY07 and Block 8.1, which begins in FY10, should complete the known CNS/ATM and nav safety requirements. The proportion of CNS/ATM / nav safety requirements allocated to Blocks 6.0 through 8.1 was determined via a design trade study conducted by Lockheed Martin (the C-130J prime contractor) and verified by the C-130J system program office and AMC. The development costs are being shared via a Global Project arrangement by the United States (USAF, USMC, USCG), the United Kingdom, Italy, Australia, Denmark, Canada, and Norway. An international program office (IPO), with USAF lead (Wright Patterson AFB, OH) manages the block upgrade development effort. Embodiment of a Block on the aircraft is the responsibility of each nation.

Lockheed Martin will be the prime contractor for these efforts, perform the non-recurring engineering and, following the successful conclusion of flight testing and certification of each block upgrade, will provide production retrofit kits on USAF C-130J aircraft. Installation will be performed by contractor, depot, and Air Force personnel.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

3600: Research, Development, Test & Evaluation, Air Force

PE 0401132F: *C-130J PROGRAM*

675061: C-130J

BA 7: Operational Systems Development

Product Development (\$ in Millions)

				FY 2010			FY 2011 Base		FY 2011 OCO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Block 7.0 , Aeronautical Systems Center (AFMC), WPAFB, OH	SS/CPAF	Lockheed Martin Aeronautics Marietta GA	22.915	26.910	Dec 2009	0.000	Dec 2010	0.000		0.000	0.000	49.825	0.000
Block 8.1, Aeronautical Systems Center (AFMC), WPAFB, OH	SS/CPAF	Lockheed Martin Information Sytems Orlando FL	0.052	0.500	Feb 2010	23.398	Feb 2011	0.000		23.398	0.000	23.950	0.000
AMC-I, Aeronautical Systems Center (AFMC), WPAFB, OH	SS/CPAF	TBD TBD	0.870	0.500	Feb 2010	0.500	Feb 2011	0.000		0.500	0.000	1.870	0.000
		Subtotal	23.837	27.910		23.898		0.000		23.898	0.000	75.645	0.000

Remarks

Support (\$ in Millions)

Cuppert (V III IIIIII)				FY 2	2010				FY 2011 FY 2011 OCO Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
IPO Support	TBD/TBD	TBD TBD	0.108	0.179	Nov 2009	0.182	Nov 2010	0.000		0.182	0.000	0.469	0.000
		Subtotal	0.108	0.179		0.182		0.000		0.182	0.000	0.469	0.000

Remarks

A&AS, Travel, Supplies - all vary on support needed

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0401132F: *C-130J PROGRAM*

PROJECT

675061: C-130J

Test and Evaluation (\$ in Millions)

				FY 2	FY 2010		2011 se	FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Air Force Materiel Command (DT&E)	TBD/TBD	TBD TBD	0.306	1.400	Oct 2009	2.160	Oct 2010	0.000		2.160	0.000	3.866	0.000
		Subtotal	0.306	1.400		2.160		0.000		2.160	0.000	3.866	0.000

Remarks

Management Services (\$ in Millions)

				FY 2	010	FY 2 Bas	-	FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
COSSURM	TBD/TBD	TBD TBD	0.740	0.530		0.530		0.000		0.530	0.000	1.800	0.000
International Savings	TBD/TBD	TBD TBD	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000
Congressional Rescissions	TBD/TBD	TBD TBD	0.074	0.000		0.000		0.000		0.000	0.000	0.074	0.000
SBIR	TBD/TBD	TBD TBD	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000
Reprogrammings	TBD/TBD	TBD TBD	0.125	0.000		0.000		0.000		0.000	0.000	0.125	0.000
Withhold	TBD/TBD	TBD TBD	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0401132F: C-130J PROGRAM

PROJECT

675061: C-130J

Management Services (\$ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	0.939	0.530		0.530		0.000		0.530	0.000	1.999	0.000

Remarks

			·							
	Total Prior Years Cost	FY 2010		2011 ase	FY 2	-	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	25.190	30.019	26.770		0.000		26.770	0.000	81.979	0.000

Remarks

Total Prior Years Cost may include only FY 2009 data.

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

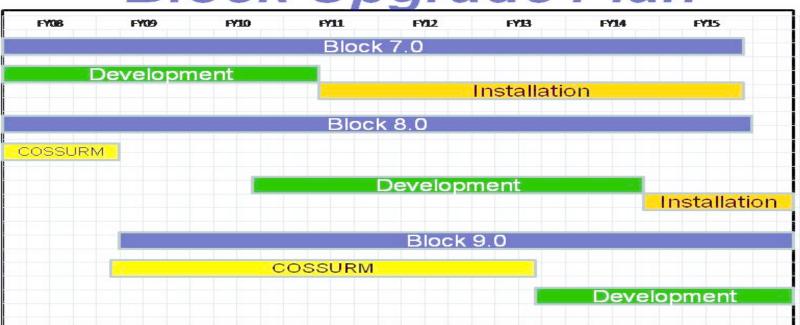
R-1 ITEM NOMENCLATURE

PE 0401132F: C-130J PROGRAM

PROJECT

675061: C-130J

C-130J International Block Upgrade Plan



COSSURM - International Co-operative Systems and Software Upgrade Requirements Management

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0401132F: *C-130J PROGRAM*

PROJECT

675061: C-130J

Schedule Details

	St	art	End		
Event	Quarter	Year	Quarter	Year	
Block 7.0 FY09 award	1	2009	1	2009	
Block 7.0 FY10 award	1	2010	1	2010	
Block 8.1 FY10 award	4	2010	4	2010	
Block 8.1 FY11 Award	1	2011	1	2011	